

In the Claims:

Please cancel Claims 53 and 54; amend Claims 1, 44 and 55; and add new Claims 56 and 57, all as shown below. Applicant respectfully reserves the right to prosecute any originally presented or canceled claims in a continuing or future application.

1. (Currently Amended) A system for software application development and modeling, capable of being integrated with a software application design modeling tool, comprising:

an expert system for automatically

reading an initial software application design UML model conforming to the software application design model tool,

reading a one or plurality of target application server design patterns, wherein each of the design patterns identifies a common object oriented design structure for designing an application in a particular context,

enhancing the software application design UML model to conform to the target application server design patterns, including creating logical packages for each data entity group in the application if one does not already exist,

allowing a developer to review the enhanced software application design UML model, and then repeating the steps of reading the UML model and server design patterns, and enhancing the UML model, so as to refine the software application design UML model, and

generating code implementations for the target application server defined by the enhanced software application design UML model; and,

an interface to a software application design modeling tool for modeling said software application design UML model, wherein said modeling includes said reading of software application design UML model, said enhancing of software application design UML model, and said generating code implementations.

2. (Original) The system of claim 1 wherein said expert system further includes means for specifying application design requirements.

3-5. (Canceled).

6. (Previously Presented) The system of claim 1 wherein said expert system further includes means for generation of an application test client to verify the integrity of the generated and modified code.
7. (Canceled).
8. (Previously Presented) The system of claim 1 wherein said expert system is provided as a plugin to the software application design modeling tool.
9. (Original) The system of claim 1 further comprising:
a database interface to allow retrieval of application design data from a relational database;
and,
an interface repository for storing interface definition language files.
10. (Original) The system of claim 1 further comprising:
means for reverse engineering an interface definition language file to extract application design information.
- 11-40. (Canceled).
41. (Previously Presented) The system according to claim 1 wherein said expert system further comprises means for generation of support files for the generated and modified code.
42. (Previously Presented) The system of claim 1 wherein said expert system is provided as a add-in to the software application design modeling tool.
43. (Previously Presented) The system according to claim 1 wherein said expert system further comprises means for scanning said software application design UML model for correctness and completeness prior to generation of implementation code.
44. (Currently Amended) A method for software application development and modeling, capable of being integrated with a software application design modeling tool, comprising the steps of:

providing an expert system for automatically
reading an initial software application design UML model conforming to the software application design model tool[[:]],
enhancing the software application design UML model to conform to target application server design patterns, wherein each of the design patterns identifies a common object oriented design structure for designing an application in a particular context, and wherein enhancing includes creating logical packages for each data entity group in the application if one does not already exist[[:]],
allowing a developer to review the enhanced software application design UML model, and then repeating the steps of reading and enhancing the UML model, so as to refine the software application design UML model, and
generating code implementations for the target application server defined by the enhanced software application design UML model; and,
providing an interface to a software application design modeling tool for modeling said software application design UML model, wherein said modeling includes said reading of software application design UML model, said enhancing of software application design UML model, and said generating code implementations.

45. (Previously Presented) The method according to claim 44 wherein said expert system further includes means for specifying application design requirements.

46. (Previously Presented) The method according to claim 44 wherein said expert system further includes means for generation of an application test client to verify the integrity of the generated and modified code.

47. (Previously Presented) The method according to claim 44 wherein said expert system is provided as a plugin to the software application design modeling tool.

48. (Previously Presented) The method according to claim 44 further comprising:
providing a database interface to allow retrieval of application design data from a relational database; and,
providing an interface repository for storing interface definition language files.

49. (Previously Presented) The method according to claim 44 further comprising:
providing means for reverse engineering an interface definition language file to extract application design information.
50. (Previously Presented) The method according to claim 44 wherein said expert system further comprises means for generation of support files for the generated and modified code.
51. (Previously Presented) The method according to claim 44 wherein said expert system is provided as a add-in to the software application design modeling tool.
52. (Previously Presented) The method according to claim 1 wherein said expert system further comprises means for scanning said software application design model for correctness and completeness prior to generation of implementation code.
- 53-54. (Canceled).
55. (Currently Amended) An expert system for software application development and modeling, comprising:
means for reading an initial software application design model conforming to the software application design model tool;
means for automatically enhancing the software application design model to conform to target application server design patterns, wherein each of the design patterns identifies a common object oriented design structure for designing an application in a particular context, and wherein enhancing includes creating logical packages for each data entity group in the application if one does not already exist;
means for allowing a developer to review the enhanced software application design UML model, and then repeating the steps of reading and enhancing the UML model, so as to refine the software application design UML model; and
means for automatically generating code implementations for the target application server defined by the enhanced software application design model[[:]].

56. (New) A method for enabling software application development and modeling, capable of being integrated with a software application design modeling tool, comprising the steps of:

- reading an initial software application design UML model conforming to the software application design model tool;

- reading a one or plurality of target application server design patterns, wherein each of the design patterns identifies a common object oriented design structure for designing an application in a particular context;

- enhancing the software application design UML model to conform to the target application server design patterns, including creating logical packages for each data entity group if one does not already exist;

- allowing a developer to review the enhanced software application design UML model, and then repeating the steps of reading the UML model and server design patterns, and enhancing the UML model, so as to refine the software application design UML model; and

- generating code implementations for the target application server defined by the enhanced software application design UML model.

57. (New) A computer readable medium, including instructions stored thereon, which when executed cause the computer to perform the steps of:

- reading an initial software application design UML model conforming to the software application design model tool;

- reading a one or plurality of target application server design patterns, wherein each of the design patterns identifies a common object oriented design structure for designing an application in a particular context;

- enhancing the software application design UML model to conform to the target application server design patterns, including creating logical packages for each data entity group if one does not already exist;

- allowing a developer to review the enhanced software application design UML model, and then repeating the steps of reading the UML model and server design patterns, and enhancing the UML model, so as to refine the software application design UML model; and

- generating code implementations for the target application server defined by the enhanced software application design UML model.